Section 1. Registration Information

Source Identification

Facility Name:	Alon Bakersfield Refining - Areas 1&2
Parent Company #1 Name:	Alon USA Energy, Inc.
Parent Company #2 Name:	

Submission and Acceptance

Submission Type:	Re-submission
Subsequent RMP Submission Reason:	Revised PHA / Hazard Review due to process change (40 CFR 68.190(b)(5))
Description:	Federal RMP 4/23/07
Receipt Date:	22-Nov-2011
Postmark Date:	22-Nov-2011
Next Due Date:	22-Nov-2016
Completeness Check Date:	22-Nov-2011
Complete RMP:	Yes
De-Registration / Closed Reason:	
De-Registration / Closed Reason Other Text:	
De-Registered / Closed Date:	
De-Registered / Closed Effective Date:	
Certification Received:	Yes

Facility Identification

EPA Facility Identifier:	1000 0014 7815
Other EPA Systems Facility ID:	93308TXCRF6451R
Facility Registry System ID:	1100 1788 7330

Dun and Bradstreet Numbers (DUNS)

Facility DUNS:	45267002
Parent Company #1 DUNS:	876661062
Parent Company #2 DUNS:	

Facility Location Address

Street 1:	6451 Rosedale Highway
Street 2:	
City:	Bakersfield
State:	CALIFORNIA
ZIP:	93308
ZIP4:	1132
County:	KERN

Facility Latitude and Longitude

Latitude (decimal):	35.382500
Longitude (decimal):	-119.070556
Lat/Long Method:	Interpolation - Photo
Lat/Long Description:	Administrative Building
Horizontal Accuracy Measure:	25
Horizontal Reference Datum Name:	North American Datum of 1983

Source Map Scale Number:	24000

Owner or Operator

Operator Name:	Paramount Petroleum Corporation
Operator Phone:	(661) 326-4200

Mailing Address

Operator Street 1:	6451 Rosedale Highway
Operator Street 2:	
Operator City:	Bakersfield
Operator State:	CALIFORNIA
Operator ZIP:	93308
Operator ZIP4:	1132
Operator Foreign State or Province:	
Operator Foreign ZIP:	
Operator Foreign Country:	

Name and title of person or position responsible for Part 68 (RMP) Implementation

RMP Name of Person:	Gordon Leaman
RMP Title of Person or Position:	General Manager
RMP E-mail Address:	gleaman@ppcla.com

Emergency Contact

Emergency Contact Name:	Fred Hrenchir
Emergency Contact Title:	Supervisor, Health & Safety
Emergency Contact Phone:	(661) 326-4388
Emergency Contact 24-Hour Phone:	(661) 326-4200
Emergency Contact Ext. or PIN:	
Emergency Contact E-mail Address:	fred.hrenchir@alonusa.com

Other Points of Contact

Facility or Parent Company E-mail Address:	
Facility Public Contact Phone:	(661) 978-2800
Facility or Parent Company WWW Homepage Address:	www.alonusa.com

Local Emergency Planning Committee

LEPC:	Region 5 LEPC Inland South

Full Time Equivalent Employees

Number of Full Time Employees (FTE) on Site:	122
FTE Claimed as CBI:	

Covered By

OSHA PSM :	Yes
EPCRA 302 :	Yes

CAA Title V:	Yes
Air Operating Permit ID:	S-33

OSHA Ranking

OSHA Star or Merit Ranking:	

Last Safety Inspection

Last Safety Inspection (By an External Agency) Date:	02-Jun-2011
Last Safety Inspection Performed By an External Agency:	EPA

Predictive Filing

Did this RMP involve predictive filing?:	

Preparer Information

Preparer Name:	Igor Shnayder
Preparer Phone:	(972) 480-9800
Preparer Street 1:	Sage Environmental Consulting, LP
Preparer Street 2:	720 West Arapaho Road
Preparer City:	Richardson
Preparer State:	TEXAS
Preparer ZIP:	75080
Preparer ZIP4:	
Preparer Foreign State:	
Preparer Foreign Country:	
Preparer Foreign ZIP:	

Confidential Business Information (CBI)

CBI Claimed:	
Substantiation Provided:	
Unsanitized RMP Provided:	

Reportable Accidents

Reportable Accidents:	See Section 6. Accident History below to determine if there were any accidents reported for this RMP.

Process Chemicals

Process ID:	1000029404
Description:	Unit 24 - SGP
Process Chemical ID:	1000035244
Program Level:	Program Level 1 process
Chemical Name:	Flammable Mixture
CAS Number:	00-11-11
Quantity (lbs):	46000
CBI Claimed:	
Flammable/Toxic:	Flammable

Flammable Mixture Chemical Components

Flammable Mixture Chemical ID:	1000029548
Chemical Name:	Isopentane [Butane, 2-methyl-]
CAS Number:	78-78-4
Flammable/Toxic:	Flammable

Flammable Mixture Chemical ID:	1000029547
Chemical Name:	Pentane
CAS Number:	109-66-0
Flammable/Toxic:	Flammable

Flammable Mixture Chemical ID:	1000029546
Chemical Name:	Isobutane [Propane, 2-methyl]
CAS Number:	75-28-5
Flammable/Toxic:	Flammable

Flammable Mixture Chemical ID:	1000029544
Chemical Name:	Propane
CAS Number:	74-98-6
Flammable/Toxic:	Flammable

Flammable Mixture Chemical ID:	1000029545
Chemical Name:	Butane
CAS Number:	106-97-8
Flammable/Toxic:	Flammable

Process ID:	1000029409
Description:	Unit 71 -Area 2 Tank Farm
Process Chemical ID:	1000035249
Program Level:	Program Level 3 process
Chemical Name:	Flammable Mixture
CAS Number:	00-11-11
Quantity (lbs):	7100000
CBI Claimed:	
Flammable/Toxic:	Flammable

Flammable Mixture Chemical Components

Flammable Mixture Chemical ID:	1000029523
Chemical Name:	Butane
CAS Number:	106-97-8
Flammable/Toxic:	Flammable

Flammable Mixture Chemical ID:	1000029524
Chemical Name:	Isobutane [Propane, 2-methyl]
CAS Number:	75-28-5
Flammable/Toxic:	Flammable

Flammable Mixture Chemical ID:	1000029525
Chemical Name:	Pentane
CAS Number:	109-66-0
Flammable/Toxic:	Flammable

Flammable Mixture Chemical ID:	1000029522
Chemical Name:	Propane
CAS Number:	74-98-6
Flammable/Toxic:	Flammable

Flammable Mixture Chemical ID:	1000029526
Chemical Name:	Isopentane [Butane, 2-methyl-]
CAS Number:	78-78-4
Flammable/Toxic:	Flammable

Process ID:	1000029407
Description:	Unit 27 - CD Hydro
Process Chemical ID:	1000035247
Program Level:	Program Level 3 process
Chemical Name:	Flammable Mixture
CAS Number:	00-11-11
Quantity (lbs):	65000
CBI Claimed:	
Flammable/Toxic:	Flammable

Flammable Mixture Chemical Components

Flammable Mixture Chemical ID:	1000029514
Chemical Name:	Pentane
CAS Number:	109-66-0
Flammable/Toxic:	Flammable

Flammable Mixture Chemical ID:	1000029564
Chemical Name:	Isopentane [Butane, 2-methyl-]
CAS Number:	78-78-4
Flammable/Toxic:	Flammable

Flammable Mixture Chemical ID:	1000029566
Chemical Name:	Butane
CAS Number:	106-97-8
Flammable/Toxic:	Flammable

Flammable Mixture Chemical ID:	1000029565
Chemical Name:	Propane
CAS Number:	74-98-6
Flammable/Toxic:	Flammable

Process ID:	1000029409
Description:	Unit 71 -Area 2 Tank Farm
Process Chemical ID:	1000035308
Program Level:	Program Level 3 process
Chemical Name:	Propane
CAS Number:	74-98-6
Quantity (lbs):	500000
CBI Claimed:	
Flammable/Toxic:	Flammable

Process ID:	1000029402
Description:	Unit 21 - HCU
Process Chemical ID:	1000035242
Program Level:	Program Level 3 process
Chemical Name:	Flammable Mixture
CAS Number:	00-11-11
Quantity (lbs):	36000
CBI Claimed:	
Flammable/Toxic:	Flammable

Flammable Mixture Chemical Components

Flammable Mixture Chemical ID:	1000029535
Chemical Name:	Propane
CAS Number:	74-98-6
Flammable/Toxic:	Flammable

Flammable Mixture Chemical ID:	1000029534
Chemical Name:	Ethane
CAS Number:	74-84-0
Flammable/Toxic:	Flammable

Flammable Mixture Chemical ID:	1000029538
Chemical Name:	Hydrogen
CAS Number:	1333-74-0
Flammable/Toxic:	Flammable

Flammable Mixture Chemical ID:	1000029533
Chemical Name:	Methane
CAS Number:	74-82-8
Flammable/Toxic:	Flammable

Flammable Mixture Chemical ID:	1000029536
Chemical Name:	Butane
CAS Number:	106-97-8
Flammable/Toxic:	Flammable

Process ID:	1000029406
Description:	Unit 26 - HTU
Process Chemical ID:	1000035246
Program Level:	Program Level 3 process
Chemical Name:	Flammable Mixture
CAS Number:	00-11-11
Quantity (lbs):	91000
CBI Claimed:	
Flammable/Toxic:	Flammable

Flammable Mixture Chemical Components

Flammable Mixture Chemical ID:	1000029562
Chemical Name:	Isopentane [Butane, 2-methyl-]
CAS Number:	78-78-4

Flammable/Toxic:	Flammable
Flammable Mixture Chemical ID:	1000029561
Chemical Name:	Pentane
CAS Number:	109-66-0
Flammable/Toxic:	Flammable
Process ID:	1000029410
Description:	Unit 81-2 Boilers
Process Chemical ID:	1000035251
Program Level:	Program Level 3 process
Chemical Name:	Ammonia (anhydrous)
CAS Number:	7664-41-7
Quantity (lbs):	11000
CBI Claimed:	
Flammable/Toxic:	Toxic

Process NAICS

Process ID:	1000029402
Process NAICS ID:	1000029662
Program Level:	Program Level 3 process
NAICS Code:	32411
NAICS Description:	Petroleum Refineries
Process ID:	1000029406
Process NAICS ID:	1000029666
Program Level:	Program Level 3 process
NAICS Code:	32411
NAICS Description:	Petroleum Refineries
Process ID:	1000029410
Process NAICS ID:	1000029670
Program Level:	Program Level 3 process
NAICS Code:	32411
NAICS Description:	Petroleum Refineries
Process ID:	1000029407
Process NAICS ID:	1000029667
Program Level:	Program Level 3 process
NAICS Code:	32411
NAICS Description:	Petroleum Refineries
Process ID:	1000029409
Process NAICS ID:	1000029669
Program Level:	Program Level 3 process
NAICS Code:	32411
NAICS Description:	Petroleum Refineries

Process ID:	1000029404
Process NAICS ID:	1000029664
Program Level:	Program Level 1 process
NAICS Code:	32411
NAICS Description:	Petroleum Refineries

Section 2. Toxics: Worst Case

Toxic Worst ID: 1000024475

Percent Weight:	99.0
Physical State:	Gas liquified by pressure
Model Used:	EPA's RMP*Comp(TM)
Release Duration (mins):	10
Wind Speed (m/sec):	1.5
Atmospheric Stability Class:	F
Topography:	Urban

Passive Mitigation Considered

Dikes:	
Enclosures:	
Berms:	
Drains:	
Sumps:	
Other Type:	

Section 3. Toxics: Alternative Release

Toxic Alter ID: 1000026245

Percent Weight:	99.0
Physical State:	Gas liquified by pressure
Model Used:	EPA's RMP*Comp(TM)
Wind Speed (m/sec):	3.0
Atmospheric Stability Class:	D
Topography:	Urban

Passive Mitigation Considered

Dikes:	
Enclosures:	
Berms:	
Drains:	
Sumps:	
Other Type:	

Active Mitigation Considered

Sprinkler System:	
Deluge System:	
Water Curtain:	
Neutralization:	
Excess Flow Valve:	
Flares:	
Scrubbers:	
Emergency Shutdown:	
Other Type:	

Section 4. Flammables: Worst Case

Flammable Worst ID: 1000017709

Model Used:	EPA's OCA Guidance Reference Tables or Equations
Endpoint used:	1 PSI

Passive Mitigation Considered

Blast Walls:
Other Type:

Flammable Worst ID: 1000017664

Model Used:	EPA's OCA Guidance Reference Tables or Equations
Endpoint used:	1 PSI

Passive Mitigation Considered

Blast Walls:
Other Type:

Section 5. Flammables: Alternative Release

Flammable Alter ID: 1000016516

Model Used: EPA's OCA Guidance Reference Tables or Equations

Passive Mitigation Considered

Dikes:
Fire Walls:
Blast Walls:
Enclosures:
Other Type:

Active Mitigation Considered

Sprinkler System:
Deluge System:
Water Curtain:
Excess Flow Valve:
Other Type:

Section 6. Accident History

No records found.

Section 7. Program Level 3

Description

Unit 21 Hydrocracker: High temperature and catalyst are used to break or crack large hydrocarbon molecules such as Vacuum Gas Oil. The prevention program is explained in detail in the Executive Summary.

Program Level 3 Prevention Program Chemicals

Prevention Program Chemical ID:	1000030227
Chemical Name:	Flammable Mixture
Flammable/Toxic:	Flammable
CAS Number:	00-11-11

Process ID:	1000029402
Description:	Unit 21 - HCU
Prevention Program Level 3 ID:	1000025389
NAICS Code:	32411

Safety Information

Safety Review Date (The date on which the safety information was last reviewed or revised):	01-Apr-2011

Process Hazard Analysis (PHA)

PHA Completion Date (Date of last PHA or PHA update):	01-Apr-2011

The Technique Used

What If:	
Checklist:	Yes
What If/Checklist:	
HAZOP:	Yes
Failure Mode and Effects Analysis:	
Fault Tree Analysis:	
Other Technique Used:	
PHA Change Completion Date (The expected or actual date of completion of all changes resulting from last PHA or PHA update):	01-Oct-2013

Major Hazards Identified

Toxic Release:	Yes
Fire:	Yes
Explosion:	Yes
Runaway Reaction:	Yes
Polymerization:	
Overpressurization:	Yes
Corrosion:	Yes
Overfilling:	Yes
Contamination:	
Equipment Failure:	Yes

Loss of Cooling, Heating, Electricity, Instrument Air:	Yes
Earthquake:	Yes
Floods (Flood Plain):	
Tornado:	
Hurricanes:	
Other Major Hazard Identified:	

Process Controls in Use

Vents:	Yes
Relief Valves:	Yes
Check Valves:	Yes
Scrubbers:	
Flares:	Yes
Manual Shutoffs:	Yes
Automatic Shutoffs:	Yes
Interlocks:	Yes
Alarms and Procedures:	Yes
Keyed Bypass:	Yes
Emergency Air Supply:	Yes
Emergency Power:	Yes
Backup Pump:	Yes
Grounding Equipment:	Yes
Inhibitor Addition:	
Rupture Disks:	
Excess Flow Device:	
Quench System:	
Purge System:	
None:	
Other Process Control in Use:	

Mitigation Systems in Use

Sprinkler System:	Yes
Dikes:	
Fire Walls:	
Blast Walls:	
Deluge System:	
Water Curtain:	
Enclosure:	
Neutralization:	
None:	
Other Mitigation System in Use:	Fire monitors; paved & sloped with drains

Monitoring/Detection Systems in Use

Process Area Detectors:	Yes
Perimeter Monitors:	
None:	
Other Monitoring/Detection System in Use:	

Changes Since Last PHA Update

Reduction in Chemical Inventory:	
Increase in Chemical Inventory:	

Change Process Parameters:	Yes
Installation of Process Controls:	Yes
Installation of Process Detection Systems:	
Installation of Perimeter Monitoring Systems:	
Installation of Mitigation Systems:	
None Recommended:	
None:	
Other Changes Since Last PHA or PHA Update:	

Review of Operating Procedures

Operating Procedures Revision Date (The date of the most recent review or revision of operating procedures):	26-May-2011

Training

Training Revision Date (The date of the most recent review or revision of training programs):	11-Aug-2011

The Type of Training Provided

Classroom:	
On the Job:	Yes
Other Training:	

The Type of Competency Testing Used

Written Tests:	Yes
Oral Tests:	Yes
Demonstration:	Yes
Observation:	Yes
Other Type of Competency Testing Used:	

Maintenance

Maintenance Procedures Revision Date (The date of the most recent review or revision of maintenance procedures):	12-Jan-2007
Equipment Inspection Date (The date of the most recent equipment inspection or test):	01-Mar-2011
Equipment Tested (Equipment most recently inspected or tested):	21-D15

Management of Change

Change Management Date (The date of the most recent change that triggered management of change procedures):	17-Sep-2011
Change Management Revision Date (The date of the most recent review or revision of management of change procedures):	06-Nov-2008

Pre-Startup Review

Pre-Startup Review Date (The date of the most recent pre-startup review):	01-May-2011

Compliance Audits

Compliance Audit Date (The date of the most recent compliance audit):	01-Apr-2007
Compliance Audit Change Completion Date (Expected or actual date of completion of all changes resulting from the compliance audit):	31-Dec-2013

Incident Investigation

Incident Investigation Date (The date of the most recent incident investigation (if any)):	07-Sep-2011
Incident Investigation Change Date (The expected or actual date of completion of all changes resulting from the investigation):	09-Sep-2011

Employee Participation Plans

Participation Plan Revision Date (The date of the most recent review or revision of employee participation plans):	27-Sep-2011

Hot Work Permit Procedures

Hot Work permit Review Date (The date of the most recent review or revision of hot work permit procedures):	31-May-2008

Contractor Safety Procedures

Contractor Safety Procedures Review Date (The date of the most recent review or revision of contractor safety procedures):	15-Jul-2008
Contractor Safety Performance Evaluation Date (The date of the most recent review or revision of contractor safety performance):	26-Sep-2011

Confidential Business Information

CBI Claimed:

Description

Unit 26 - Hydrotreater (HTU): The Risk Management Program only applies to Depentanizer portion of the unit, which removes pentanes from gasoline feedstock. The prevention program is explained in detail in the Executive Summary.

Program Level 3 Prevention Program Chemicals

Prevention Program Chemical ID:	1000030231
Chemical Name:	Flammable Mixture
Flammable/Toxic:	Flammable
CAS Number:	00-11-11
Process ID:	1000029406
Description:	Unit 26 - HTU
Prevention Program Level 3 ID:	1000025393
NAICS Code:	32411

Safety Information

Safety Review Date (The date on which the safety information was last reviewed or revised):	01-Jun-2008

Process Hazard Analysis (PHA)

PHA Completion Date (Date of last PHA or PHA update):	01-Jun-2008

The Technique Used

What If:	
Checklist:	Yes
What If/Checklist:	
HAZOP:	Yes
Failure Mode and Effects Analysis:	
Fault Tree Analysis:	
Other Technique Used:	
PHA Change Completion Date (The expected or actual date of completion of all changes resulting from last PHA or PHA update):	29-Oct-2008

Major Hazards Identified

Toxic Release:	Yes
Fire:	Yes
Explosion:	Yes
Runaway Reaction:	
Polymerization:	
Overpressurization:	Yes
Corrosion:	Yes
Overfilling:	Yes
Contamination:	
Equipment Failure:	Yes
Loss of Cooling, Heating, Electricity, Instrument Air:	Yes

Earthquake:	Yes
Floods (Flood Plain):	
Tornado:	
Hurricanes:	
Other Major Hazard Identified:	

Process Controls in Use

Vents:	Yes
Relief Valves:	Yes
Check Valves:	Yes
Scrubbers:	
Flares:	Yes
Manual Shutoffs:	
Automatic Shutoffs:	
Interlocks:	
Alarms and Procedures:	Yes
Keyed Bypass:	
Emergency Air Supply:	Yes
Emergency Power:	Yes
Backup Pump:	Yes
Grounding Equipment:	Yes
Inhibitor Addition:	
Rupture Disks:	
Excess Flow Device:	
Quench System:	
Purge System:	
None:	
Other Process Control in Use:	

Mitigation Systems in Use

Sprinkler System:	
Dikes:	
Fire Walls:	
Blast Walls:	
Deluge System:	
Water Curtain:	
Enclosure:	
Neutralization:	
None:	
Other Mitigation System in Use:	Fire monitors; paved & sloped with drains

Monitoring/Detection Systems in Use

Process Area Detectors:	Yes
Perimeter Monitors:	
None:	
Other Monitoring/Detection System in Use:	

Changes Since Last PHA Update

Reduction in Chemical Inventory:	Yes
Increase in Chemical Inventory:	
Change Process Parameters:	

Installation of Process Controls:	
Installation of Process Detection Systems:	
Installation of Perimeter Monitoring Systems:	
Installation of Mitigation Systems:	
None Recommended:	
None:	
Other Changes Since Last PHA or PHA Update:	

Review of Operating Procedures

Operating Procedures Revision Date (The date of the most recent review or revision of operating procedures):	04-May-2011

Training

Training Revision Date (The date of the most recent review or revision of training programs):	11-Sep-2011

The Type of Training Provided

Classroom:	
On the Job:	Yes
Other Training:	Computer-Based Training

The Type of Competency Testing Used

Written Tests:	Yes
Oral Tests:	Yes
Demonstration:	Yes
Observation:	Yes
Other Type of Competency Testing Used:	

Maintenance

Maintenance Procedures Revision Date (The date of the most recent review or revision of maintenance procedures):	12-Jan-2007
Equipment Inspection Date (The date of the most recent equipment inspection or test):	21-Feb-2008
Equipment Tested (Equipment most recently inspected or tested):	26-V13

Management of Change

Change Management Date (The date of the most recent change that triggered management of change procedures):	04-Sep-2008
Change Management Revision Date (The date of the most recent review or revision of management of change procedures):	06-Nov-2008

Pre-Startup Review

Pre-Startup Review Date (The date of the most recent pre-startup review):	01-May-2011

Compliance Audits

Compliance Audit Date (The date of the most recent compliance audit):	01-Apr-2007
Compliance Audit Change Completion Date (Expected or actual date of completion of all changes resulting from the compliance audit):	31-Dec-2013

Incident Investigation

Incident Investigation Date (The date of the most recent incident investigation (if any)):	16-Oct-2008
Incident Investigation Change Date (The expected or actual date of completion of all changes resulting from the investigation):	25-Feb-2009

Employee Participation Plans

Participation Plan Revision Date (The date of the most recent review or revision of employee participation plans):	27-Sep-2011

Hot Work Permit Procedures

Hot Work permit Review Date (The date of the most recent review or revision of hot work permit procedures):	31-May-2008

Contractor Safety Procedures

Contractor Safety Procedures Review Date (The date of the most recent review or revision of contractor safety procedures):	15-Jul-2008
Contractor Safety Performance Evaluation Date (The date of the most recent review or revision of contractor safety performance):	26-Sep-2011

Confidential Business Information

CBI Claimed:

Description

Unit 81-2 Steam Systems/Boilers: Boilers generate steam that is distributed to refinery units. Flue gases generated from Boiler 81-H9 are treated in a SCR system for NOx/CO removal using anhydrous ammonia. The prevention program is explained in detail in the Executive Summary.

Program Level 3 Prevention Program Chemicals

Prevention Program Chemical ID:	1000030236
Chemical Name:	Ammonia (anhydrous)
Flammable/Toxic:	Toxic
CAS Number:	7664-41-7
Process ID:	1000029410
Description:	Unit 81-2 Boilers
Prevention Program Level 3 ID:	1000025394
NAICS Code:	32411

Safety Information

Safety Review Date (The date on which the safety information was last reviewed or revised):	01-Jun-2007

Process Hazard Analysis (PHA)

PHA Completion Date (Date of last PHA or PHA update):	01-Jun-2007

The Technique Used

What If:	
Checklist:	Yes
What If/Checklist:	
HAZOP:	Yes
Failure Mode and Effects Analysis:	
Fault Tree Analysis:	
Other Technique Used:	
PHA Change Completion Date (The expected or actual date of completion of all changes resulting from last PHA or PHA update):	24-Oct-2008

Major Hazards Identified

Toxic Release:	Yes
Fire:	Yes
Explosion:	Yes
Runaway Reaction:	
Polymerization:	
Overpressurization:	Yes
Corrosion:	Yes
Overfilling:	Yes
Contamination:	
Equipment Failure:	Yes

Loss of Cooling, Heating, Electricity, Instrument Air:	Yes
Earthquake:	Yes
Floods (Flood Plain):	
Tornado:	
Hurricanes:	
Other Major Hazard Identified:	

Process Controls in Use

Vents:	Yes
Relief Valves:	Yes
Check Valves:	Yes
Scrubbers:	
Flares:	
Manual Shutoffs:	
Automatic Shutoffs:	Yes
Interlocks:	
Alarms and Procedures:	Yes
Keyed Bypass:	Yes
Emergency Air Supply:	Yes
Emergency Power:	Yes
Backup Pump:	Yes
Grounding Equipment:	Yes
Inhibitor Addition:	
Rupture Disks:	
Excess Flow Device:	
Quench System:	
Purge System:	
None:	
Other Process Control in Use:	

Mitigation Systems in Use

Sprinkler System:	
Dikes:	
Fire Walls:	
Blast Walls:	
Deluge System:	
Water Curtain:	
Enclosure:	
Neutralization:	
None:	
Other Mitigation System in Use:	Fire monitors

Monitoring/Detection Systems in Use

Process Area Detectors:	Yes
Perimeter Monitors:	
None:	
Other Monitoring/Detection System in Use:	

Changes Since Last PHA Update

Reduction in Chemical Inventory:	
Increase in Chemical Inventory:	

Change Process Parameters:	
Installation of Process Controls:	
Installation of Process Detection Systems:	
Installation of Perimeter Monitoring Systems:	
Installation of Mitigation Systems:	
None Recommended:	
None:	Yes
Other Changes Since Last PHA or PHA Update:	

Review of Operating Procedures

Operating Procedures Revision Date (The date of the most recent review or revision of operating procedures):	02-Dec-2010

Training

Training Revision Date (The date of the most recent review or revision of training programs):	11-Jun-2011

The Type of Training Provided

Classroom:	
On the Job:	Yes
Other Training:	

The Type of Competency Testing Used

Written Tests:	Yes
Oral Tests:	Yes
Demonstration:	Yes
Observation:	Yes
Other Type of Competency Testing Used:	

Maintenance

Maintenance Procedures Revision Date (The date of the most recent review or revision of maintenance procedures):	12-Jan-2007
Equipment Inspection Date (The date of the most recent equipment inspection or test):	28-Apr-2011
Equipment Tested (Equipment most recently inspected or tested):	81-2-H9

Management of Change

Change Management Date (The date of the most recent change that triggered management of change procedures):	08-Jan-2011
Change Management Revision Date (The date of the most recent review or revision of management of change procedures):	06-Nov-2008

Pre-Startup Review

Pre-Startup Review Date (The date of the most recent pre-startup review):	01-May-2011

Compliance Audits

Compliance Audit Date (The date of the most recent compliance audit):	01-Apr-2007
Compliance Audit Change Completion Date (Expected or actual date of completion of all changes resulting from the compliance audit):	15-Jun-2012

Incident Investigation

Incident Investigation Date (The date of the most recent incident investigation (if any)):	18-Mar-2011
Incident Investigation Change Date (The expected or actual date of completion of all changes resulting from the investigation):	01-Nov-2011

Employee Participation Plans

Participation Plan Revision Date (The date of the most recent review or revision of employee participation plans):	27-Sep-2011

Hot Work Permit Procedures

Hot Work permit Review Date (The date of the most recent review or revision of hot work permit procedures):	31-May-2008

Contractor Safety Procedures

Contractor Safety Procedures Review Date (The date of the most recent review or revision of contractor safety procedures):	15-Jul-2008
Contractor Safety Performance Evaluation Date (The date of the most recent review or revision of contractor safety performance):	26-Sep-2011

Confidential Business Information

CBI Claimed:

Description

Unit 27 - CD Hydro (CDHU): Converts a portion of benzene in gasoline to cyclohexane to achieve maximum benzene concentration specifications. The prevention program is explained in detail in the Executive Summary.

Program Level 3 Prevention Program Chemicals

Prevention Program Chemical ID:	1000030232
Chemical Name:	Flammable Mixture
Flammable/Toxic:	Flammable
CAS Number:	00-11-11
Process ID:	1000029407
Description:	Unit 27 - CD Hydro
Prevention Program Level 3 ID:	1000025395
NAICS Code:	32411

Safety Information

Safety Review Date (The date on which the safety information was last reviewed or revised):	01-Apr-2009

Process Hazard Analysis (PHA)

PHA Completion Date (Date of last PHA or PHA update):	01-Apr-2009

The Technique Used

What If:	
Checklist:	Yes
What If/Checklist:	
HAZOP:	Yes
Failure Mode and Effects Analysis:	
Fault Tree Analysis:	
Other Technique Used:	
PHA Change Completion Date (The expected or actual date of completion of all changes resulting from last PHA or PHA update):	31-Dec-2013

Major Hazards Identified

Toxic Release:	Yes
Fire:	Yes
Explosion:	Yes
Runaway Reaction:	
Polymerization:	
Overpressurization:	Yes
Corrosion:	Yes
Overfilling:	Yes
Contamination:	
Equipment Failure:	Yes
Loss of Cooling, Heating, Electricity, Instrument Air:	Yes

Earthquake:	Yes
Floods (Flood Plain):	
Tornado:	
Hurricanes:	
Other Major Hazard Identified:	

Process Controls in Use

Vents:	Yes
Relief Valves:	Yes
Check Valves:	Yes
Scrubbers:	
Flares:	Yes
Manual Shutoffs:	Yes
Automatic Shutoffs:	Yes
Interlocks:	
Alarms and Procedures:	Yes
Keyed Bypass:	
Emergency Air Supply:	Yes
Emergency Power:	Yes
Backup Pump:	Yes
Grounding Equipment:	Yes
Inhibitor Addition:	
Rupture Disks:	
Excess Flow Device:	
Quench System:	
Purge System:	
None:	
Other Process Control in Use:	

Mitigation Systems in Use

Sprinkler System:	
Dikes:	
Fire Walls:	
Blast Walls:	
Deluge System:	
Water Curtain:	
Enclosure:	
Neutralization:	
None:	
Other Mitigation System in Use:	Fire monitors; paved & sloped with drains

Monitoring/Detection Systems in Use

Process Area Detectors:	
Perimeter Monitors:	
None:	Yes
Other Monitoring/Detection System in Use:	

Changes Since Last PHA Update

Reduction in Chemical Inventory:	
Increase in Chemical Inventory:	
Change Process Parameters:	

Installation of Process Controls:	
Installation of Process Detection Systems:	
Installation of Perimeter Monitoring Systems:	
Installation of Mitigation Systems:	
None Recommended:	
None:	Yes
Other Changes Since Last PHA or PHA Update:	

Review of Operating Procedures

Operating Procedures Revision Date (The date of the most recent review or revision of operating procedures):	27-Jul-2011

Training

Training Revision Date (The date of the most recent review or revision of training programs):	11-Sep-2011

The Type of Training Provided

Classroom:	
On the Job:	Yes
Other Training:	

The Type of Competency Testing Used

Written Tests:	Yes
Oral Tests:	Yes
Demonstration:	Yes
Observation:	Yes
Other Type of Competency Testing Used:	

Maintenance

Maintenance Procedures Revision Date (The date of the most recent review or revision of maintenance procedures):	12-Jan-2007
Equipment Inspection Date (The date of the most recent equipment inspection or test):	01-Feb-2011
Equipment Tested (Equipment most recently inspected or tested):	27-H1

Management of Change

Change Management Date (The date of the most recent change that triggered management of change procedures):	30-May-2011
Change Management Revision Date (The date of the most recent review or revision of management of change procedures):	06-Nov-2008

Pre-Startup Review

Pre-Startup Review Date (The date of the most recent pre-startup review):	01-May-2011

Compliance Audits

Compliance Audit Date (The date of the most recent compliance audit):	01-Apr-2007
Compliance Audit Change Completion Date (Expected or actual date of completion of all changes resulting from the compliance audit):	31-Dec-2013

Incident Investigation

Incident Investigation Date (The date of the most recent incident investigation (if any)):	12-May-2007
Incident Investigation Change Date (The expected or actual date of completion of all changes resulting from the investigation):	15-Jan-2009

Employee Participation Plans

Participation Plan Revision Date (The date of the most recent review or revision of employee participation plans):	27-Sep-2011

Hot Work Permit Procedures

Hot Work permit Review Date (The date of the most recent review or revision of hot work permit procedures):	31-May-2008

Contractor Safety Procedures

Contractor Safety Procedures Review Date (The date of the most recent review or revision of contractor safety procedures):	15-Jul-2008
Contractor Safety Performance Evaluation Date (The date of the most recent review or revision of contractor safety performance):	26-Sep-2011

Confidential Business Information

CBI Claimed:

Description

Unit 71 Area 2 Tank Farm: Storage, inter-plant transfer, blending, dewatering, chemical treatment, pipeline receiving and shipping, rail receiving and shipping, and truck loading/unloading of crude oils, intermediate products, additives, chemicals, and finished products. The prevention program is explained in detail in the Executive Summary.

Program Level 3 Prevention Program Chemicals

Prevention Program Chemical ID:	1000030234
Chemical Name:	Flammable Mixture
Flammable/Toxic:	Flammable
CAS Number:	00-11-11
Process ID:	1000029409
Description:	Unit 71 -Area 2 Tank Farm
Prevention Program Level 3 ID:	1000025397
NAICS Code:	32411

Safety Information

Safety Review Date (The date on which the safety information was last reviewed or revised):	01-May-2007

Process Hazard Analysis (PHA)

PHA Completion Date (Date of last PHA or PHA update):	01-May-2007

The Technique Used

What If:	
Checklist:	Yes
What If/Checklist:	
HAZOP:	Yes
Failure Mode and Effects Analysis:	
Fault Tree Analysis:	
Other Technique Used:	
PHA Change Completion Date (The expected or actual date of completion of all changes resulting from last PHA or PHA update):	31-Dec-2011

Major Hazards Identified

Toxic Release:	Yes
Fire:	Yes
Explosion:	Yes
Runaway Reaction:	
Polymerization:	
Overpressurization:	Yes
Corrosion:	Yes
Overfilling:	Yes
Contamination:	
Equipment Failure:	Yes

Loss of Cooling, Heating, Electricity, Instrument Air:	Yes
Earthquake:	Yes
Floods (Flood Plain):	
Tornado:	
Hurricanes:	
Other Major Hazard Identified:	

Process Controls in Use

Vents:	Yes
Relief Valves:	Yes
Check Valves:	Yes
Scrubbers:	
Flares:	
Manual Shutoffs:	
Automatic Shutoffs:	Yes
Interlocks:	
Alarms and Procedures:	
Keyed Bypass:	
Emergency Air Supply:	Yes
Emergency Power:	
Backup Pump:	Yes
Grounding Equipment:	Yes
Inhibitor Addition:	
Rupture Disks:	
Excess Flow Device:	
Quench System:	
Purge System:	
None:	
Other Process Control in Use:	

Mitigation Systems in Use

Sprinkler System:	
Dikes:	Yes
Fire Walls:	
Blast Walls:	
Deluge System:	
Water Curtain:	
Enclosure:	
Neutralization:	
None:	
Other Mitigation System in Use:	Fire monitors

Monitoring/Detection Systems in Use

Process Area Detectors:	Yes
Perimeter Monitors:	
None:	
Other Monitoring/Detection System in Use:	

Changes Since Last PHA Update

Reduction in Chemical Inventory:	Yes
Increase in Chemical Inventory:	

Change Process Parameters:
Installation of Process Controls:
Installation of Process Detection Systems:
Installation of Perimeter Monitoring Systems:
Installation of Mitigation Systems:
None Recommended:
None:
Other Changes Since Last PHA or PHA Update:

Review of Operating Procedures

Operating Procedures Revision Date (The date of the most recent review or revision of operating procedures):	11-Jul-2011

Training

Training Revision Date (The date of the most recent review or revision of training programs):	11-May-2011

The Type of Training Provided

Classroom:	
On the Job:	Yes
Other Training:	Computer-Based Training

The Type of Competency Testing Used

Written Tests:	Yes
Oral Tests:	Yes
Demonstration:	Yes
Observation:	Yes
Other Type of Competency Testing Used:	

Maintenance

Maintenance Procedures Revision Date (The date of the most recent review or revision of maintenance procedures):	12-Jan-2007
Equipment Inspection Date (The date of the most recent equipment inspection or test):	17-Aug-2011
Equipment Tested (Equipment most recently inspected or tested):	71-T10M03

Management of Change

Change Management Date (The date of the most recent change that triggered management of change procedures):	18-Sep-2011
Change Management Revision Date (The date of the most recent review or revision of management of change procedures):	06-Nov-2008

Pre-Startup Review

Pre-Startup Review Date (The date of the most recent pre-startup review):	11-Jun-2011

Compliance Audits

Compliance Audit Date (The date of the most recent compliance audit):	01-Apr-2007
Compliance Audit Change Completion Date (Expected or actual date of completion of all changes resulting from the compliance audit):	15-Jun-2012

Incident Investigation

Incident Investigation Date (The date of the most recent incident investigation (if any)):	17-Aug-2011
Incident Investigation Change Date (The expected or actual date of completion of all changes resulting from the investigation):	31-Oct-2011

Employee Participation Plans

Participation Plan Revision Date (The date of the most recent review or revision of employee participation plans):	27-Sep-2011

Hot Work Permit Procedures

Hot Work permit Review Date (The date of the most recent review or revision of hot work permit procedures):	12-Jan-2007

Contractor Safety Procedures

Contractor Safety Procedures Review Date (The date of the most recent review or revision of contractor safety procedures):	15-Jul-2008
Contractor Safety Performance Evaluation Date (The date of the most recent review or revision of contractor safety performance):	26-Sep-2011

Confidential Business Information

CBI Claimed:	

Section 8. Program Level 2

No records found.

Section 9. Emergency Response

Written Emergency Response (ER) Plan

Community Plan (Is facility included in written community emergency response plan?):	Yes
Facility Plan (Does facility have its own written emergency response plan?):	Yes
Response Actions (Does ER plan include specific actions to be taken in response to accidental releases of regulated substance(s)?):	Yes
Public Information (Does ER plan include procedures for informing the public and local agencies responding to accidental release?):	Yes
Healthcare (Does facility's ER plan include information on emergency health care?):	Yes

Emergency Response Review

Review Date (Date of most recent review or update of facility's ER plan):	15-Feb-2011

Emergency Response Training

Training Date (Date of most recent review or update of facility's employees):	15-May-2011

Local Agency

Agency Name (Name of local agency with which the facility ER plan or response activities are coordinated):	Kern County Fire Department
Agency Phone Number (Phone number of local agency with which the facility ER plan or response activities are coordinated):	(661) 391-7000

Subject to

OSHA Regulations at 29 CFR 1910.38:	Yes
OSHA Regulations at 29 CFR 1910.120:	Yes
Clean Water Regulations at 40 CFR 112:	Yes
RCRA Regulations at CFR 264, 265, and 279.52:	Yes
OPA 90 Regulations at 40 CFR 112, 33 CFR 154, 49 CFR 194, or 30 CFR 254:	Yes
State EPCRA Rules or Laws:	Yes
Other (Specify):	

Executive Summary

Risk Management Plan

Alon Bakersfield Property, Inc. doing business as Alon Bakersfield Refining
Bakersfield Refinery, Areas 1 and 2

Executive Summary

This is the risk management plan (RMP) for Areas 1 and 2 of Alon Bakersfield Refining (ABR) facility (EPA Facility ID 1000 0014 7815). The RMP is required under the U.S. Environmental Protection Agency (EPA) risk management program codified in 40 Code of Federal Regulations, Part 68 (40 CFR 68). Refining operations are primarily conducted in Areas 1 and 2, which are on contiguous properties. ABR also has shutdown delayed coking operations and several storage tanks containing flammable mixtures in Area 3, which is not adjacent to Areas 1 and 2. A separate RMP submittal has been prepared for Area 3.

The purpose of the risk management program is to identify and prevent potential accidental releases of specific "regulated substances" that have the potential to cause harm to the public and the environment. "Regulated substances" are hazardous chemicals identified by EPA. ABR has quantities of various "regulated substances" above the threshold amounts.

The remainder of the Executive Summary is organized as follows:

Section 1: Accidental Release Prevention and Emergency Response Policies at ABR
Section 2: Overview of Regulated Substances at ABR
Section 3: Worst-case Release Scenarios and Alternative Release Scenarios
Section 4: ABR Accidental Release Prevention Program
Section 5: Five-year Accidental Release Summary
Section 6: Emergency Response Program
Section 7: Planned Changes to Improve Safety

Section 1: Accidental Release Prevention and Emergency Response Policies at ABR

Equipment at the various units must be designed, operated, and maintained in full compliance with applicable internal engineering standards, accepted industry codes, or industry standards. Systems and procedures are in place to control changes in process technology, facilities, operating procedures, and maintenance procedures, in order to provide for continued safe and reliable operations.

All employees at ABR have the responsibility to protect the environment and to ensure the safety and security of his/her fellow workers. Written policies and standards are in place to ensure:

* The safety and health of employees and other workers at the site;
* Protection of the environment;
* Reliable and efficient operation of the facilities;
* Minimization of the risk of product or property losses; and
* Maintaining a positive relationship with the communities adjacent to our facility.

These written policies and standards are discussed further elsewhere in this submittal.

Section 2: Overview of Regulated Substances at ABR Areas 1 and 2

ABR began operations as Mohawk Petroleum in 1932. Under different owners, regular expansion and improvements of facilities have occurred over the years, including the integration of an adjacent refinery in 1986 that doubled gasoline production. In 1998, the refinery became a part of Equilon Enterprises, LLC, a joint venture of Shell Oil Company and Texaco Inc. Shell Oil Products US acquired Texaco's interest in 2002. On March 16, 2005 Big West of California, LLC acquired interest in the refinery. Alon

Bakersfield Property, Inc. took over the site in 2010. Several units previously reported in May 2007 Risk Management Plan submittal to the U.S. EPA have been de-inventoried, or the inventories have been reduced.

ABR processes vacuum gas oils into a number of consumer products, including gasoline, diesel, and liquefied petroleum gases (LPG).

Summary of Covered Process Units below lists the covered process units that are subject to the federal risk management program, defines the appropriate RMP program level, and identifies the regulated substances handled in these units.

Summary of Covered Process Units - ABR Areas 1 and 2

Unit: Hydrocracking Unit (Unit 21)
High temperature and catalyst are used to break or crack large hydrocarbon molecules such as vacuum gas oil from other locations.
Federal RMP Program Level: Level 3
Regulated Toxic Substances: None
Regulated Flammable Substances: Flammable mixtures, including hydrogen, methane, ethane, propane, butane

Unit: De-Isobutanizer Unit (Unit 24) (Also known as Saturated Gas Plant.)
Separates and purifies liquefied petroleum gas (LPG) streams from the CVU, the reformers, and the hydrocracker.
Federal RMP Program Level: Level 1
Regulated Toxic Substances: None
Regulated Flammable Substances: Flammable mixtures, including propane, isobutane, butane, isopentane, pentane

Unit: Hydrotreating (Unit 26) - Depentanizer
The Risk Management Program only applies to Depentanizer portion of the unit, which removes pentanes from gasoline feedstock.
Federal RMP Program Level: Level 3
Regulated Toxic Substances: None
Regulated Flammable Substances: Flammable mixtures, including butane, isopentane, pentane

Unit: CD Hydro Unit (Unit 27)
Converts a portion of benzene in gasoline to cyclohexane to achieve maximum benzene concentration specifications.
Federal RMP Program Level: Level 3
Regulated Toxic Substances: None
Regulated Flammable Substances: Flammable mixtures, including propane, butane, isopentane, pentane

Unit: Area 2 Tank Farm (Unit 71)
Storage, interplant transfer, blending, dewatering, chemical treatment, pipeline receiving and shipping, rail receiving and shipping, and truck loading / unloading of crude oils, intermediate products, additives, chemicals, and finished products.
Federal RMP Program Level: Level 3
Regulated Toxic Substances: None
Regulated Flammable Substances: Flammable mixtures, including propane, isobutane, butane, isopentane, pentane; and propane

Unit: Steam Systems/Boilers: Boilers (Unit 81-2)
Generate steam that is distributed to refinery units. Flue gases generated from boiler 81-H9 are treated in an SCR system for Nox/CO removal.
Federal RMP Program Level: Level 3
Regulated Toxic Substances: Ammonia (anhydrous)
Regulated Flammable Substances: None

Section 3: Worst-case Release Scenarios and Alternative Release Scenarios

Off site consequence analyses are essential in identifying potential hazards of accidental releases. The results of the analyses are used to assist the Kern County Environmental Health Services Department and Fire Department in their emergency response planning.

3.1 Worst-case Scenarios

ABR conducted offsite consequence analyses for the worst-case scenarios (WCS) using EPA's "RMP Offsite Consequence Analysis Guidelines" (OCAG). This methodology was used because the RMP rule set forth specific criteria that must be followed for modeling the worst-case scenarios. The worst-case scenarios must incorporate very conservative, simplified assumptions about the nature of the releases and the resulting emission rates into the air.

A worst-case release scenario is defined as the scenario that results in the greatest distance from the point of release to a specified "endpoint." As defined by the rule, the endpoint for toxics substances is a specified concentration, and for flammables is a specified overpressure from a vapor cloud explosion (VCE).

The WCS for a regulated toxic is one where the total quantity in the largest vessel or pipe is released over 10 minutes, resulting in acute health effects associated with airborne exposure. For a regulated flammable, the WCS is one where the total quantity of regulated flammables in the largest vessel or pipe is assumed to vaporize and instantaneously result in a VCE.

A summary of the WCS for ABR Areas 1 and 2 is provided below. As required by the RMP rule, the results are shown for one vessel containing a toxic substance (anhydrous ammonia) and one vessel containing flammables. These scenarios produced the greatest distance to their respective toxic and flammable endpoints. An additional WCS is reported for the RMP Program 1 process, De-isobutnizer Unit (Unit 24).

Summary of Worst-case Scenario Results - ABR Areas 1 and 2

Toxic WCS
Regulated Substance: Ammonia, anhydrous (toxic gas)
Area/Unit: Unit 81-2 Area 2 Steam Systems/ Boilers (SCR Anhydrous Ammonia Storage Tank at Boiler 81H09)
Administrative Controls Considered: Quantity stored limited to 85% of capacity by written operating procedures
Passive Mitigation Considered: None
Off Site Impacts: Yes

Flammable WCS 1
Regulated Substance: Flammable Mixture
Area/Unit: Unit 71 Area 2 Tank Farm (Mixed Pentane Tank 20M53)
Administrative Controls Considered: None
Passive Mitigation Considered: None
Off Site Impacts: Yes

Flammable WCS 2
Regulated Substance: Flammable Mixture
Area/Unit: Unit 24 Area 2 De-isobutanizer Unit (No. 2 De-isobutanizer 24V14)
Administrative Controls Considered: None
Passive Mitigation Considered: None
Off Site Impacts: No

3.2 Alternative Release Scenarios

In addition to the WCS, this RMP contains a second set of release scenarios designated as alternative release scenarios (ARS). These scenarios are more realistic than the WCS for assessing the potential hazards posed by process units and developing emergency response plans. Although these scenarios may be unlikely to occur, they are physically possible and reasonably feasible.

ABR conducted offsite consequence analyses for the ARS using EPA's RMP OCAG.

A summary of the ARS for ABR Areas 1 and 2 is provided below. There is one scenario for each toxic substance and one for flammables.

Summary of Alternative Release Scenario Results - ABR Areas 1 and 2

Toxic ARS 1
Regulated Substance: Ammonia, anhydrous (toxic gas)
Area/Unit: Unit 81-2 Area 2 Steam Systems/ Boilers (SCR Anhydrous Ammonia Storage Tank at Boiler 81H09)
Administrative Controls Considered: Quantity stored limited to 85% of capacity by written operating procedures
Passive Mitigation Considered: None
Off Site Impacts: Yes
Release duration: 10 minutes

Flammable ARS
Regulated Substance: Flammable mixture
Area/Unit: Unit 71 Area 2 Tank Farm (Mixed Pentane Tank 20M53)
Administrative Controls Considered: None
Passive Mitigation Considered: None
Off Site Impacts: Yes
Release duration: 60 minutes

Section 4: ABR Accidental Release Prevention Program

This section describes the general accident prevention programs in place at ABR. This program is required for all level 3 covered process units described in Section 2, Table 1, and are applied throughout the facility.

Employees are responsible for implementing the prevention elements for his/her department as follows:

Process Safety Information: Engineering, Safety, and Inspections
Process Hazards Analysis: PSM, Engineering, and Operations
Operating Procedures: Operations
Training: Operations
Contractors: Procurement, Safety, and Maintenance
Pre-startup Safety Review: Operations and Engineering
Mechanical Integrity: Maintenance
Hot Work Permit: Operations
Management of Change: Project/Process Engineering, Management, Operations, PSM, Safety, Maintenance, Environmental, and Inspections
Incident Investigation: Safety, Environmental, and PSM
Emergency Planning and Response: Safety
Injury Illness Prevention Program: Safety
Employee Participation Program: PSM

All records associated with the prevention elements and the risk management program are retained for a minimum of 5 years.

4.1 Process Safety Information

ABR maintains a variety of technical documents that are used to help ensure safe operations of the process units. Process safety information (PSI), which addresses chemical properties and associated hazards, limits for key process parameters, limits for specific chemical inventories, and equipment design information, was compiled for each process unit.

PSI is used in process unit hazard analyses, inspection, maintenance, and training activities. This information is kept current by management of change and pre-startup safety review procedures, which are discussed further in this section.

This information, in combination with written procedures and trained personnel, provides a basis for establishing inspection and maintenance activities, as well as for evaluating proposed process and facility changes to ensure that safety features in the process are not compromised.

4.2 Process Hazards Analysis

ABR conducts process hazards analyses (PHAs) to ensure that hazards associated with process units are identified and controlled. Under this program, each process is systematically examined by a multi-disciplinary team to identify hazards that could result in an accidental release of a regulated substance and to ensure that adequate control is in place to manage those hazards. ABR has used the hazard and operability study methodology as the refinery's primary PHA technique. Pertinent parameters, such as flow, temperature, pressure, and liquid level, were reviewed.

In order to help ensure that the process controls or process hazards do not deviate significantly from the original design safety features, ABR updates and revalidates the hazard analyses every 5 years.

A seismic review of the refinery was conducted as part of the technical studies. The refinery is located in an area that is prone to earthquakes. A site walkthrough was conducted in 1996 by a qualified engineering company for Shell, the previous owner. The objective of seismic assessments was to provide reasonable assurance that a release of regulated substance having offsite consequences would not occur as a result of a major earthquake. The results and findings from the seismic review are documented and retained in the computerized tracking system. A revalidation of the seismic assessment has been initiated by ABR.

4.3 Operating Procedures

ABR has developed and implemented written operating procedures that provide clear instructions for safely conducting activities involved in each process. The written operating procedures address the various modes of process operations, such as unit startup, normal operations, temporary operations, emergency shutdown, normal shutdown, and initial startup of a new process.

These procedures are used as references by experienced operators and for consistent training of new operators. The procedures are maintained current and accurate by revising them to reflect changes made through the management of change process and through annual certification.

4.4 Training

ABR's general policy requires operating personnel to be trained in the safe operation of facilities, handling process upsets, emergency response, and personal safety. Employees who understand the process and how to safely operate a process can significantly decrease the number and severity of incidents.

Refresher training for all operations and maintenance employees in Safety, Health, and Environmental subjects and operating procedures (as appropriate) is provided at varying intervals, depending upon requirements.

4.5 Management of Change

A management of change (MOC) review is required for modifications to facilities or changes to process unit operating conditions. The procedure does not apply to "replacement in kind," which is defined as replacements that satisfy the design specifications and are functionally identical to the item being replaced.

The MOC process is intended to assess the impact of proposed changes on process safety, the environment, operability, reliability, and product quality in process units. The requirements for MOC are documented in a written procedure. MOC information is kept for the life of the process unit.

4.6 Pre-startup Safety Reviews

The purpose of the pre-startup safety review is to ensure that safety features, procedures, personnel, and equipment are appropriately prepared for startup prior to placing the equipment into service. This review provides additional assurance that construction is in accordance with the design specifications and that all systems are operationally ready. The pre-startup safety review also verifies that accident prevention program requirements are properly implemented.

Pre-startup reviews are governed by a written pre-startup safety review procedure and cover a variety of issues, including:

* Construction and/or equipment are in accordance with design specifications;
* Safety, operating, maintenance, and emergency procedures are in place and are adequate;
* For new facilities, a process hazard analysis has been performed and recommendations have been resolved or implemented before startup;
* Modified facilities have complied with MOC requirements, including updating the PSI (e.g., piping instrument diagrams, operating procedures); and
* Training of each applicable operating employee and maintenance worker has been completed.

4.7 Mechanical Integrity

ABR has established and implemented written procedures to maintain the ongoing integrity of process equipment, pressure vessels and storage tanks, relief and vent systems and devices, emergency shutdown systems, and controls.

The ABR mechanical integrity program follows recognized and generally accepted good engineering practices. ABR maintains a certification record that each inspection and test has been performed, which includes the date of the inspection, the name of the inspector and test, and the serial number or other identifier of the equipment. Every recommendation made by an inspector is resolved and documented. In so doing, ABR will correct deficiencies in equipment that are outside acceptable limits (as defined by the PSI) before further use, or in a safe and timely manner that ensures safe operation.

4.8 Compliance Audits

To ensure that the accident prevention program is functioning properly, ABR conducts audits every 3 years to ensure that the accident prevention program is being implemented. The audits include an assessment of written prevention program elements, retained records (e.g., training records, completed hot work permits), and personnel interviews to assess level of implementation for the prevention program.

Compliance reviews are performed by trained, expert personnel. Audit results are communicated to affected employees and contractors, and are retained for 5 years. Action items or recommendation resulting from the various audits are tracked to completion through a computerized database.

4.9 Incident Investigation

The ABR accident investigation program covers four types of incidents:

* Personal injury;
* Environmental release;
* Equipment damage and loss of production caused by fire, equipment failure, or other circumstance; and
* Those incidents that could have reasonably resulted in a catastrophic event.

The goal of an investigation is to determine the facts associated with a release or near miss and to develop corrective actions to prevent a recurrence of the incident or a similar incident. The investigation team is directed by a team leader who has had training in incident investigation.

The results of the investigation are communicated to all employees. ABR maintains copies of incident investigation reports for a minimum of 5 years. Corrective measures and action items resulting from an investigation are tracked to completion in a computerized database.

4.10 Employee Participation

All ABR employees have the right to participate in the development and conduct of PSM activities as stated in the risk management and PSM regulations. It is the policy and practice of ABR to encourage employee participation in all aspects of accidental release prevention elements.

All process safety records are available for review by employees and the Joint Health, Safety and Environmental Committee.

4.11 Safe Work Practices

ABR safe work practices include hot work, confined space entry, lockout/tagout, line entry, and various other types of work covered under a Departmental Safety Permit.

The ABR hot work permit certifies that the various portions of fire prevention and protection requirements have been implemented prior to beginning hot work operations. This procedure documents the date(s) authorized for hot work, identifies the equipment on which hot work is to be done, and ensures that all personnel involved in permitting are trained on this procedure.

4.12 Contractors

Contractors at ABR are selected based on their past safety performance, their current safety programs, and their conformance to the "ABR Refinery Safety Rules and Regulations Manual".

The "ABR Refinery Safety Rules and Regulations Manual" provides contractor employees safety information, including entrance and exit procedures, safe work practices and work permitting procedures, emergency action plans, PSI, and contractor injury/illness reporting.

ABR also requires annual contractor orientation training, which includes information on the emergency action plan, potential process hazards, and site safety rules. Proof of training is provided via renewable access cards.

Section 5: Five-year Accidental Release Summary

ABR compiled a 5-year accident history for accidental releases from covered processes in Areas 1 and 2 that resulted in deaths, injuries, or significant property damage on site, or known offsite deaths, injuries, evacuations, sheltering in place, property damage or environmental damage. The compilation of this information satisfy the requirements of the federal risk management program and EPA's implementing regulations (40 Code of Federal Regulations, Part 68).

The 5-year accident history provides an explanation of the factors that caused the accident, the on- and offsite impacts of the accident, and the changes made by ABR to minimize the likelihood that these accidents will occur again.

No reportable accidents occurred at the ABR in the five-year period preceding this resubmission of the RMP.

Section 6: Emergency Response Program

ABR has established a comprehensive emergency response program. The purpose of the program is to protect workers, the public, and the environment from harm due to refinery emergencies. The program includes procedures to provide for comprehensive emergency response through the following:

* First aid and medical treatment
* Emergency incidents, including fire, potential fire, hazardous materials releases, and natural disasters such as floods, winds, earthquakes, and electrical storms
* Emergency evacuation and rescue

* Notification of local, state and federal emergency response agencies and the public if an incident occurs
* Post-incident cleanup and decontamination

The emergency response program provides training of all refinery staff, which varies in level of detail based on assigned roles and responsibilities for staff under the program. Routine audits are routinely performed by ABR staff and third parties (the Kern County Fire Department and ABR's insurance company) to ensure compliance with portions or the entire emergency response program.

Section 7: Planned Changes to Improve Safety

ABR has a comprehensive hazard identification and mitigation program to ensure process safety. This program includes periodic PHAs, investigations of near misses, and audits of processing units. Management is notified of deficiencies or potential hazards, and a mitigation plan is developed.

Current plans to improve safety include installation of more reliable process controls and process area detection systems.